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## UNITED STATES PATENT AND TRADEMARK OFFICE

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# BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

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Ex parte ROLAND M. HOCHMUTH and JOHN MARKS

Appeal 2009-003778 Application 10/004,191 Technology Center 2600

Decided: February 24, 2010

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Before, JOHN C. MARTIN, MAHSHID D. SAADAT, and ROBERT E. NAPPI, *Administrative Patent Judges*.

NAPPI, Administrative Patent Judge.

**DECISION ON APPEAL** 

This is a decision on appeal under 35 U.S.C. § 134(a) of the final rejection of claims 37-61. We have jurisdiction under 35 U.S.C. § 6(b).

We affirm the Examiner's rejection of these claims.

#### **INVENTION**

The invention is directed to a system and method of communicating graphics image data over a communication network through the use of a network interface and a graphics adapter comprising a compression unit. *See* Spec: 4. Claim 37 is representative of the invention and reproduced below:

37. A system for displaying an image, comprising: a display device communicatively couplable to a network and adapted to display the image, the display device comprising:

a display network interface operable to receive bitmap image data of the image from the network;

a display frame buffer operable to store the received bitmap image data; and

a display refresh unit operable to read the bitmap image data from the display frame buffer and display and refresh the image at a refresh rate.

<sup>&</sup>lt;sup>1</sup> Claims 1-36 were cancelled in an Amendment After Final, mailed May 23, 2005.

## **REFERENCES**

| Tsuda    | US 6,044,445    | Mar. 28, 2000                          |
|----------|-----------------|--|
| Van Ee   | US 6,466,203 B2 | Oct. 15, 2002<br>(filed Jul. 19, 2000) |
| Robotham | US 6,704,024 B2 | Mar. 9, 2004<br>(filed Nov. 29, 2000)  |

## **REJECTIONS AT ISSUE**

Claims 37-39, 43-45, 50-52, 55, 58, and 61 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Van Ee in view of Tsuda. Ans. 4-6.

Claims 40-42, 46-49, 53-54, 56-57, and 59-60 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Van Ee in view of Tsuda and Robotham. Ans. 6-8.

## **ISSUES**

35 U.S.C. § 103(a) Obviousness Rejections

Appellants argue on pages 8-9 of the Appeal Brief that the combination of Van Ee with Tsuda is in error. Appellants argue that there is no motivation to combine the Van Ee reference with Tsuda. App. Br. 8-9. Thus, Appellants' contentions present us with the issue: Have Appellants shown that the Examiner erred in combining Van Ee with Tsuda?

Rejection of claims 37-39, 43-45, 50-52, 58, and 61 under 35 U.S.C. § 103(a) as being unpatentable over Van Ee in view of Tsuda

Independent Claims 37, 45, and 52

Appellants argue on pages 5-6 and 9-10 of the Appeal Brief and pages 4-7 of the Reply Brief that the Examiner's rejection of claim 37, 45, and 52 is in error. Appellants selected claim 37 as representative of the group comprising claims 37, 45, and 52. App. Br. 5. Appellants argue that neither of the references discloses receiving, from the network, bitmap image data. App. Br. 5; Reply Br. 4.

Thus, Appellants' contentions with respect to claims 37, 45, and 52 present us with the issue: Have Appellants shown that the Examiner erred in finding that Van Ee in view of Tsuda discloses or suggests receiving bitmap image data of the image from the network?

# Dependent Claims 38, 39, 43, and 50-51

Appellants argue on page 6 of the Appeal Brief and page 7 of the Reply Brief that the Examiner's rejection of claims 38, 39, 43, and 50-51 is in error. Dependent claims 38, 39, 43, and 50-51 depend upon and contain similar limitations to independent claims 37 and 45. Appellants present the same arguments discussed above with respect to independent claims 37 and 45. App. Br. 6 and 7. Thus, Appellants' arguments with respect to the Examiner's rejection of claims 38, 39, 43, and 50-51 present us with the same issue as claims 37 and 45.

## *Claim 55 and 61*

Appellants argue on pages 6-7 of the Appeal Brief and page 8 of the Reply Brief that the Examiner's rejection of claims 55 and 61 is in error. We select claim 55 as representative of the group since Appellants do not

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separately argue claim 61. Appellants argue that neither of the references discloses a single-chip display controller. App. Br. 7; Reply Br. 8.

Thus, Appellants' contentions present us with the issue: Have Appellants shown that the Examiner erred in finding that Van Ee in view of Tsuda discloses or suggests a single-chip display controller?

#### Claim 58

Appellants argue on pages 7-8 of the Appeal Brief and pages 8-9 of the Reply Brief that the Examiner's rejection of claim 58 is in error.

Appellants argue that neither of the references discloses receiving graphics data from a frame buffer of a remote device. App. Br. 8; Reply Br. 9.

Thus, Appellants' contentions present us with the issue: Have Appellants shown that the Examiner erred in finding that Van Ee in view of Tsuda discloses or suggests receiving graphics data from a frame buffer of a remote device?

Rejection of claims 40-42, 46-49, 53-54, 56-57, and 59-60 under 35 U.S.C. § 103(a) as being unpatentable over Van Ee in view of Tsuda and Robotham

Appellants argue on page 10 of the Appeal Brief and page 9 of the Reply Brief that the Examiner's rejection of claim 40-42, 46-49, 53-54, 56-57, and 59-60 is in error. Appellants argue that these claims are allowable based upon their dependency on independent claims 37, 45, 52, 55, and 58. App. Br. 10; Reply Br. 9. Thus, Appellants' arguments with respect to claims 40-42, 46-49, 53-54, 56-57, and 59-60 present us with the same issues as claims 37, 45, 52, 55, and 58.

# FINDINGS OF FACT (FF)

#### Tsuda

- 1. Tsuda discloses a method of transferring data over a network from one device to another. Col. 1, Il. 30-33 and Fig. 1.
- 2. Image data is transferred over a network by a network interface 13 comprising a buffer 14. Col. 12, II. 9-19 and Fig. 12.
- 3. Upon transfer, the image data is received by a network interface 13 and stored in a buffer 14. The data is subsequently processed and displayed on a display device using an appropriate refresh rate. Col. 1, ll. 61-65 and col. 12, ll. 23-46 and Fig. 13.

#### Van Ee

- 4. Van Ee discloses a handheld device 100 with Internet access. Col. 3, 11. 45-47 and Fig. 1.
- 5. The device 100 contains a touch screen 104 that allows the user to retrieve a web page, via a modem 114, and display the graphical image on an LCD 102. Col. 3, 1. 65-col. 4, 1. 5 and Fig. 1.

### PRINCIPLES OF LAW

Office personnel must rely on Appellants' disclosure to properly determine the meaning of the terms used in the claims. *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 980 (Fed. Cir. 1995) (en banc). "[I]nterpreting what is *meant* by a word *in* a claim is not to be confused with adding an extraneous limitation appearing in the specification, which is improper." *In re Cruciferous Sprout Litigation*, 301 F.3d 1343, 1348 (Fed. Cir. 2002) (internal quotation marks and citations omitted).

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On the issue of obviousness, the Supreme Court has stated that "[t]he combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results." *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 416 (2007).

[A]n implicit motivation to combine exists . . . when the "improvement" is technology-independent and the combination of references results in a product or process that is more desirable, for example because it is stronger, cheaper, cleaner, faster, lighter, smaller, more durable, or more efficient. Because the desire to enhance commercial opportunities by improving a product or process is universal . . . there exists in these situations a motivation to combine prior art references even absent any hint of suggestion in the references themselves. In such situations, the proper question is whether the ordinary artisan possesses knowledge and skills rendering him *capable* of combining the prior art references.

Dystar Textilfarben Gmbh & Co. Deutschland KG v. C.H. Patrick Co., 464 F.3d 1356, 1368 (Fed. Cir. 2006).

#### **ANALYSIS**

35 U.S.C. § 103(a) Obviousness Rejections

Appellants' arguments have not persuaded us of error in the Examiner's obviousness rejections. Appellants initially argue that the combination of Tsuda with Van Ee is not obvious because there is no motivation to combine the references. App. Br. 8. We disagree.

Van Ee discloses a device that allows a user to display a graphical image that is received from the Web, via a modem, on an LCD. FF 5.

Tsuda discloses a method of transferring data from one device to another over a network. FF 1. Tsuda stores image data in a buffer and transfers the

data to the display device at an appropriate refresh rate. FF 3. Both devices display an image as a result of receiving data. Therefore, we consider using Tsuda's system of refreshing data with Van Ee's LCD as nothing more than using a known device to perform its known function of appropriately displaying an image on a display device. As such, we find that the combination of Van Ee with Tsuda yields the predictable result of properly displaying an image.

Further, the Examiner has provided a motivation to combine the references. Ans. 5. The Examiner stated that the combination of Tsuda with Van Ee would "ensure the received image is properly displayed on the display device." Ans. 5. Appellants argue that the Examiner's motivation is a conclusory statement because neither reference discloses a problem with displaying an image. App. Br. 9. More particularly, Appellants argue:

[T]he Examiner states, "the display device as taught by *Van Ee* is <u>capable</u> of refreshing the image in order to display video frame by frame," (Office Action, page 3) (emphasis added). In combining the teachings of the references, the Examiner further states, "This is <u>also</u> taught by *Tsuda*." (Office Action, page 3) (emphasis added). However, the Examiner's own statement appears to indicate that there is no apparent disadvantage/need present in *Van Ee* that would generally motivate one of ordinary skill in the art to combine the teachings of another reference with the teachings of *Van Ee* because *Van Ee* is already capable of doing something that the Examiner considers to be taught by *Tsuda*.

App. Br. 8. This argument is unconvincing because the Examiner's position is that the recited display refresh unit is disclosed in both Van Ee and Tsuda, and Appellants do not argue that neither reference discloses a display refresh unit. Furthermore, the ability to combine references does not require that there be a problem either of the references. Additionally, Appellants have

not persuaded us that combining a refresh unit with a display unit is "uniquely challenging or difficult for one of ordinary skill in the art." *Leapfrog Enters., Inc. v. Fisher-Price, Inc.*, 485 F.3d 1157, 1162 (Fed. Cir. 2007) (citing *KSR*, 550 U.S. at 418-19).

Rejection of claims 37-39, 43-45, 50-52, 58, and 61 under 35 U.S.C. § 103(a) as being unpatentable over Van Ee in view of Tsuda

Independent Claims 37, 45, and 52

Appellants' arguments have not persuaded us of error in the Examiner's rejection of claim 37. Claim 37 recites "a display network interface operable to receive bitmap image data of the image from the network." Appellants do not deny that data is received by the handheld device from the network, but rather argue that the received data is not "bitmap image data." App. Br. 6; Reply Br. 5. Appellants argue that the references "appear" to disclose receiving data in the form of a web page or streamed video that is processed and converted into a bitmap prior to storing in the frame buffer. App. Br. 6; Reply Br. 5. Thus, Appellants argue that the references do not disclose what the claim requires. App. Br. 10; Reply Br. 6.

We are not persuaded by this argument as it is not commensurate in scope with the claim. The Examiner finds that neither Appellants' Specification nor the claim requires that the display network interface receive bitmap image data *directly* from the network. Ans. 8. We concur with the Examiner's claim interpretation. Appellants' Specification is consistent with this interpretation since the Specification requires that high-level instructions are translated into bitmap images prior to rendering an image. Spec. 5:28-30. Thus, scope of the claim includes receiving data

from the network that is converted to a bitmap prior to storage in the frame buffer and does not require that the received data be a bit map image.

As noted above, Appellants do not dispute that Van Ee teaches data is received from the network, processed, and converted into a bitmap prior to storage in the frame buffer. App. Br. 6; Reply Br. 5. Therefore, we are not persuaded of error in the Examiner's finding that Van Ee discloses the claimed step of receiving bitmap image data. Accordingly we sustain the Examiner's rejection of claim 37 and claims 45 and 52 that are included in the grouping with claim 37.

## Dependent Claims 38, 39, 43, and 50-51

Appellants' arguments have not persuaded us of error in the Examiner's rejection of claims 38, 39, 43, and 50-51. Dependent claims 38, 39, 43, and 50-51 depend upon and contain similar limitations discussed *supra* with respect to independent claims 37 and 45. Appellants' arguments present the same issues discussed with respect to independent claims 37 and 45. App. Br. 6 and 7. Therefore, we sustain the Examiner's rejection of claims 38, 39, 43, and 50-51 for the reasons discussed *supra* with respect to claims 37 and 45.

## Claim 55 and 61

Appellants' arguments have not persuaded us of error in the Examiner's rejection of claims 55 and 61. Claim 55 recites "the single-chip display controller comprises: a network interface . . . and a display refresh unit." Claim 61 recites similar limitations. The Examiner has found that the combination of Van Ee with Tsuda discloses a network interface and a

display refresh unit, as required by claim 55. Ans. 6. The Examiner admits that the combination of the two devices onto a single-chip is not explicitly disclosed in the references. Ans. 6. However, the Examiner also finds that "it would have been obvious to one skilled in the art to integrate the components of the network interface and the display refresh unit in a single chip display controller because by doing so, the size of the circuit board can be reduced and the circuit paths can also be shortened, thereby reducing the cost while enhancing performance." Ans. 6. Thus, the Examiner has found that the skilled artisan would recognize that integration of multiple components on one chip has the advantages over separate components. Appellants argue that this statement is an unsupported speculation since a single-chip display controller may cost more or require a larger circuit board. App. Br. 7; Reply Br. 8. We disagree.

Appellants' statements have not disproved the Examiner's finding. Making a product smaller is a technology-independent improvement that would be universally recognized even if the reference itself does not suggest the improvement. *See Dystar*, 464 F.3d at 1368. As a result, we sustain the Examiner's rejection of claims 55 and 61.

#### Claim 58

Appellants' arguments have not persuaded us of error in the Examiner's rejection of claim 58. Claim 58 recites "a display network interface operable to receive graphics image data of the image over the network from a frame buffer of a remote source device." Appellants argue that neither reference discloses receiving the data from a frame buffer of a

remote device. App. Br. 8; Reply Br. 8-9. However, the Examiner finds that Tsuda teaches this limitation, citing Figures 12 and 13 of Tsuda. Final Rej. 7; Ans. 9. We agree with the Examiner.

Tsuda's Figure 12 discloses a transferring network interface, which contains a buffer 14. FF 2. The transferring network interface is equivalent to the remote source device. Image data is sent from the transferring network interface to a receiving network interface where it is stored in a buffer. FF 3. The receiving network interface then processes the data and displays the image on a display device. FF 3. The receiving network interface is equivalent to a display network interface. Therefore, Tsuda does disclose that image data is transferred through a buffer of a remote source device and received by a buffer of the display network as claimed. Furthermore, Appellants have not addressed, let alone shown error in, the Examiner's reliance on Figures 12 and 13 for a teaching of a frame buffer of a remote device. As a result, we sustain the Examiner's rejection of claim 58.

Rejection of claims 40-42, 46-49, 53-54, 56-57, and 59-60 under 35 U.S.C. § 103(a) as being unpatentable over Van Ee in view of Tsuda and Robotham

Appellants' arguments have not persuaded us of error in the Examiner's rejection of claims 40-42, 46-49, 53-54, 56-57, and 59-60. Claims 40-42, 46-49, 53-54, 56-57, and 59-60 ultimately depend upon claims 37, 45, 52, 55, and 58 (respectively) and as such include the same limitations discussed *supra* with respect to claims 37, 45, 52, 55, and 58. App. Br. 10; Reply Br. 9. Therefore, we sustain the Examiner's rejection of

claims 40-42, 46-49, 53-54, 56-57, and 59-60 for the reasons discussed *supra* with respect to claims 37, 45, 52, 55, and 58.

## **CONCLUSION**

Appellants have not shown that the Examiner erred in combining Van Ee with Tsuda.

Appellants have not shown that the Examiner erred in finding that Van Ee in view of Tsuda discloses or suggests receiving bitmap image data of the image from the network.

Appellants have not shown that the Examiner erred in finding that Van Ee in view of Tsuda discloses or suggests a single-chip display controller.

Appellants have not shown that the Examiner erred in finding that Van Ee in view of Tsuda discloses or suggests receiving graphics data from a frame buffer of a remote device.

#### **SUMMARY**

The Examiner's decision to reject claims 37-61 is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136 (a)(1)(iv).

# **AFFIRMED**

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